

**National Stroke Project – Atrial Fibrillation**  
**State Performance Measures for National HCQIP Initiative to Improve Quality of Care**  
1/31/00

*Measures are based on evaluation and treatment recommendations from guidelines published by the American Heart Association, the National Stroke Association, and from results of randomized controlled clinical trials. Measurement selection also involved measures developed in consultation with local experts in over 80 PRO atrial fibrillation projects in more than 40 states undertaken during the 5th SOW and through work done on the MQIS module for Atrial Fibrillation.*

**Core Quality Indicators**

*The primary criteria used for selection of these measures are: (a) derivation from a published treatment guideline; (b) documentation of a link between the measured process of care and an important health outcome; and (c) PRO experience with the measure. Ideally, evidence for this “process-outcome link” should include both efficacy (clinical trials) and effectiveness (community-based cohort studies), although effectiveness data relevant to the Medicare population is unlikely to be available for most stroke topic measures. Additional criteria include the feasibility of reliably measuring the process and the amenability of the process to improvement.*

**Sample:** 750 randomly selected inpatient fee-for-service Medicare beneficiary (all ages) acute-care hospital discharge records per state (regardless of the beneficiary’s state of residence) meeting the following criteria:

***Inclusions:***

Principal or any secondary discharge diagnosis ICD-9-CM code: 427.31

Time periods: Cycle 1 - 4/98 - 9/98

Cycle 2 - 7/98 - 12/98

Cycle 3 - 10/98 - 3/99

***Exclusions:***

Transferred to another acute care hospital

Discharged against medical advice

Unable to determine discharge disposition

**Atrial Fibrillation QI #1. Proportion of cases that met inclusion criteria and had no exclusions that were prescribed warfarin at discharge**

***Denominator inclusions:***

Discharged alive

The diagnosis of atrial fibrillation must be confirmed by physician documentation on the day of arrival or any time during the hospitalization in at least one of the following manners:

- physician documentation indicated that atrial fibrillation was present as a current finding but there was no official interpretation of EKG, telemetry strip, rhythm strip or Holter monitor report that documented atrial fibrillation
- physician documentation referred to an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report that showed atrial fibrillation
- there was an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report in the medical record showing atrial fibrillation with a physician signature or initials or other indication of an official interpretation.

There must be physician documentation of atrial fibrillation at discharge or documentation of intermittent atrial fibrillation.

***Denominator exclusions:***

Lone atrial fibrillation

Planned surgery within 7 days following D/C

Physician documentation of risk for falls

Alcoholism/drug abuse (history or current)

Dual chamber pacemaker (history or current)

Schizophrenia/active psychosis (history or current)

Terminal illness (life expectancy less than 6 months)

Terminal/comfort care

Allergy to warfarin

Complications related to warfarin (history or current)

Hepatic failure (history or current)

Unrepaired intracranial aneurysm (history or current)

Bleeding disorder

Warfarin discontinued during hospitalization due to complication and not restarted

Endocarditis/pericarditis (within 6 months prior to hospitalization or current)

Extensive/metastatic cancer (history or current)

Brain/CNS cancer (history or current)

Seizures (history or current)

Malignant hypertension (history or current)

CVA, hemorrhagic (history or current)

Peptic ulcer (current)

Intracranial surgery/biopsy (current)

Hemorrhage - any type (history and current)

Physician documented rationale for not prescribing warfarin:

- risk for bleeding

- risk for falls
- mental status
- liver disease
- terminal illness
- patient refused, reason not specified
- patient refused, did not want risk
- discontinued due to bleeding
- on ASA as a regular medication
- arthritis requiring NSAIDs or ASA

***Numerator inclusions:***

Warfarin prescribed at discharge

Physician documentation of a plan to start warfarin after discharge

***denominator:*** number of cases that met inclusion criteria and had no exclusions

***numerator:*** number of cases in the denominator that were prescribed warfarin at discharge or had a plan to start warfarin after discharge

**Atrial fibrillation (Profiling Measures)**

*Additional measures, which have not yet been incorporated into published guidelines or with less certainty whether the process of care can be feasibly and reliably assessed or is amenable to quality improvement efforts, will also be calculated. While these measures will not be used to evaluate PRO performance during the 6th SOW, they may prove useful in local improvement projects and might be eligible for inclusion as core measures in the next PRO contract cycle.*

**1. Echocardiogram for new onset atrial fibrillation.**

***Denominator inclusions:***

Discharged alive

The diagnosis of atrial fibrillation must be confirmed by physician documentation on the day of arrival or any time during the hospitalization in at least one of the following manners:

- physician documentation indicated that atrial fibrillation was present as a current finding but there was no official interpretation of EKG, telemetry strip, rhythm strip or Holter monitor report that documented atrial fibrillation
- physician documentation referred to an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report that showed atrial fibrillation
- there was an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report in the medical record showing atrial fibrillation with a physician signature or initials or other indication of an official interpretation.

Atrial fibrillation must be documented by the physician as “new onset”. Synonyms for “new onset” include:

- acute episode
- first episode
- initial episode
- initial occurrence
- new
- new onset (no prior treatment)
- recent onset
- untreated
- documentation of current atrial fibrillation with no medical history of atrial fibrillation

***Denominator exclusions:***

Terminal/comfort care

***Numerator inclusions:***

Echocardiogram within one year prior to hospitalization

Echocardiogram during hospitalization

Echocardiogram planned following discharge

***denominator:*** number of cases that met inclusion criteria and had no exclusions

***numerator:*** number of cases in the denominator with an echocardiogram obtained or planned

## **2. Thyroid lab test for new onset atrial fibrillation.**

***Denominator inclusions:***

Discharged alive

The diagnosis of atrial fibrillation must be confirmed by physician documentation on the day of arrival or any time during the hospitalization in at least one of the following manners:

- physician documentation indicated that atrial fibrillation was present as a current finding but there was no official interpretation of EKG, telemetry strip, rhythm strip or Holter monitor report that documented atrial fibrillation
- physician documentation referred to an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report that showed atrial fibrillation
- there was an EKG or EKG report, telemetry strip, rhythm strip, or Holter monitor report in the medical record showing atrial fibrillation with a physician signature or initials or other indication of an official interpretation.

Atrial fibrillation must be documented by the physician as “new onset”. Synonyms for “new onset” include:

- acute episode
- first episode

- initial episode
- initial occurrence
- new
- new onset (no prior treatment)
- recent onset
- untreated
- documentation of current atrial fibrillation with no medical history of atrial fibrillation

***Denominator exclusions:***

Terminal/comfort care

***Numerator inclusions:***

Thyroid lab test obtained

***denominator:*** number of cases that met inclusion criteria and had no exclusions

***numerator:*** number of cases in the denominator with a thyroid lab test

### **3. Patient/family/caregiver education regarding warfarin at discharge**

***Denominator inclusions:***

Discharged alive

Warfarin prescribed at discharge

Plan for warfarin after discharge

***Denominator exclusions:***

None

***Numerator inclusions:***

Warfarin education given

***denominator:*** number of cases that met inclusion criteria and had no exclusions

***numerator:*** number of cases in the denominator that received education regarding warfarin at discharge

#### **4. Planned follow-up PT/INR**

***Denominator inclusions:***

Discharged alive

Warfarin prescribed at discharge

***Denominator exclusions:***

None

***Numerator inclusions:***

Planned follow-up PT/INR

***denominator:*** number of cases that met inclusion criteria and had no exclusions

***numerator:*** number of cases in the denominator with planned follow-up PT/INR